



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,994	07/24/2001	Joseph H. Berkovitz	101.957.124	5234

23483 7590 09/16/2005

WILMER CUTLER PICKERING HALE AND DORR LLP
60 STATE STREET
BOSTON, MA 02109

EXAMINER

WU, RUTAO

ART UNIT	PAPER NUMBER
----------	--------------

3639

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,994

Applicant(s)

BERKOVITZ ET AL.

Examiner

Rutao Wu

Art Unit

3639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15, 20-24, 25-33 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. A claim limited to a machine or manufacture which has practical application in the technological arts is statutory. In most cases, a claim to a specific machine or manufacture will have practical application in the technological arts. See MPEP 2106, 2100-14 (quoting *In re Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557). Additionally, for subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea or mathematical algorithm in the technological arts. See *In re Alappat* 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond V.*

Art Unit: 3639

Diehr, 450 U.S. at 192, 209 USPQ at 10). For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

See *In re Musgrave*, 431 F.2d 882, 167 USPQ 280 (CCPA 1970).

In the present case, claims 1-15, 20-24 and 25-33 only recite an abstract idea. The recited steps of merely determining if certain fee/discount rules apply to items purchased and if the rules apply then mathematical calculation is done to determine the final price of the item does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to determine the final price of items that meet certain conditional rules.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case claims 1-15 and 24, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation in the preamble that the method is "computer system". Looking at the claim as a whole, nothing the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. An invention, which is eligible or patenting under 35 U.S.C. 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The fundamental test for patent eligibility is thus to determine whether the claimed invention produces a "use, concrete and tangible result". See *AT&T v. Excel Communications Inc.*, 172 F.3d at 1358, 50 USPQ2d at 1452 and *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d at 1373, 47 USPQ2d at 1601 (Fed. Cir. 1998). The test for practical application as applied by the examiner involves the determination of the following factors"

(a) "Useful" – The Supreme Court in *Diamond v. Diehr* requires that the examiner look at the claimed invention as a whole and compare any asserted utility with the claimed invention to determine whether the asserted utility is accomplished. Applying utility case law the examiner will note that:

- i. the utility need not be expressly recited in the claims, rather it may be inferred.
- ii. if the utility is not asserted in the written description, then it must be well established.

(b) "Tangible" – Applying *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994), the examiner will determine whether there is simply a mathematical construct claimed, such as a disembodied data structure and method of making it. If so, the claim involves no more than a manipulation of

an abstract idea and therefore, is nonstatutory under 35 U.S.C. 101. In *Warmerdam* the abstract idea of a data structure became capable of producing a useful result when it was fixed in a tangible medium, which enabled its functionality to be realized.

- (c) "Concrete" – Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. An appropriate rejection under 35 U.S.C. 101 should be accompanied by a lack of enablement rejection, because the invention cannot operate as intended without undue experimentation.

In the present case, the claimed invention determines if conditional rules are met on items purchased (i.e., repeatable) used in calculating the final price of the item (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1-15, 20-24, 25-33 are deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-17, 19-28, 31, 33, 34-37 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat No. 5,987,429 to Maritzen et al.

Referring to claim 1:

A computer system for dynamic pricing comprising:

At least one static calculator for making price calculations that are not conditional; and (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

At least one dynamic calculator for making price calculations based upon conditional rules. (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Referring to claim 2:

The computer system of claim 1 wherein the at least one static calculator comprises a pre-calculator that determines an initial price. (col 5: line 28; col 8: lines 13-17)

Referring to claim 3:

The computer system of claim 1 wherein the at least one static calculator comprises a post-processing calculator that adjusts a determined price according to a price generating algorithm. (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Referring to claim 4:

The computer system of claim 1 wherein the at least one dynamic calculator further comprises a qualifier and a discount calculator. (col 1: lines 63-67; col 6: lines 53-54; col 7: lines 8-12)

Referring to claim 5:

The computer system of claim 4 wherein the qualifier applies rules to determine if an item is qualified to receive a discount. (col 1: lines 63-65; col 7: lines 7-11)

Referring to claim 6:

The computer system of claim 5 wherein the rules comprise a condition that must be satisfied for an item to qualify for the discount. (col 6: lines 59-66; col 7: lines 15-22)

Referring to claim 7:

The computer system of claim 5 wherein the rules comprise a condition that must be satisfied for an item to qualify for the discount and a target upon which to apply the discount. (col 6: lines 59-66)

Referring to claim 8:

The computer system of claim 5 wherein the discount calculator applies a discount to an item that is determined to be qualified to receive a discount. (col 6: lines 53-54; col 8: lines 13-17)

Referring to claim 9:

The computer system of claim 1 wherein the static calculators further comprise a pre-calculator that determines an initial price and a post-processing calculator that adjusts a determined price according to a price generation algorithm; and (col 2: lines 3-5; col 5: lines 28-29; col 8: lines 13-17, 41-42)

The at least one dynamic calculator further comprises a qualifier and a discount calculator. (col 1: lines 63-67; col 6: lines 53-54; col 7: lines 8-12)

Referring to claim 10:

The computer system of claim 1 wherein the at least one static calculator and the at least one dynamic calculator make up a pricing engine. (col 2: lines 1-5)

Referring to claim 11:

The computer system of claim 10 further comprising a plurality of pricing engines. (col 2: lines 57-59)

Referring to claim 12:

The computer system of claim 11 wherein one of the plurality of pricing engines calculates a price for a particular item. (col 5: line 28; col 8: lines 13-17)

Referring to claim 13:

The computer system of claim 11 wherein one of the plurality of pricing engines calculates a shipping price of a particular item. (col 8: lines 17-20)

Referring to claim 14:

The computer system of claim 11 wherein one of the plurality of pricing engines calculates an applicable tax amount for a particular item. (col 6: lines 53-54; col 8: lines 13-17)

Referring to claim 15:

The computer system of claim 11 wherein one of the plurality of pricing engines calculates an amount comprising a price for all items in an order, shipping costs and applicable taxes for the order. (col 2: lines 3-5, col 8: lines 41-42)

Referring to claim 16:

The computer system of claim 10 wherein the pricing engine is connected to a network for determining prices of items for sale over the network. (col 3: lines 9-12)

Referring to claim 17:

The computer system of claim 16 wherein the network is the Internet. (col 3: lines 9-12)

Referring to claim 19:

The computer system of claim 16 wherein the network is telephone-based. (col 4: lines 16-18)

Referring to claim 20:

A system for dynamic pricing comprising:

At least one static calculator for making price calculations that are not conditional; (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

At least one dynamic calculator for making price calculations based upon conditional rules, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein the dynamic calculator further comprises a qualifier and a discount calculator. (col 1: lines 63-67; col 6: lines 53-54; col 7: lines 8-12)

Referring to claim 21:

A system for dynamic pricing comprising:

At least one static calculator for making price calculations that are not conditional; (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

At least one dynamic calculator for making price calculations based upon conditional rules, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein the at least one static calculator comprises at least one pre-calculator that determines an initial price. (col 5: lines 28; col 8: lines 13-17)

Referring to claim 22:

A system for dynamic pricing comprising:

At least one static calculator for making price calculations that are not conditional; and (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

At least one dynamic calculator for making price calculations based upon conditional rules, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein the at least one static calculator comprises at least one post-processing calculator that performs final adjustments to a price based upon a price generation algorithm. (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Referring to claim 23:

A system for dynamic pricing comprising:

At least one static calculator for making price calculations that are not conditional; and (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

At least one dynamic calculator for making price calculations based upon conditional rules, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein the static calculators further comprise a pre-calculator that determines an initial price and a post-processing calculator that adjusts a determined price

Art Unit: 3639

according to a price generation algorithm; (col 2: lines 3-5; col 5: lines 28-29; col 8: lines 13-17, 41-42) and

The at least on dynamic calculator further comprises a qualifier and a discount calculator. (col 1: lines 63-67; col 6: lines 53-54; col 7: lines 8-12)

Referring to claim 24:

A computer system for dynamic pricing comprising:

A module for setting an initial price on at least one item; (col 5: lines 28; col 8: lines 13-17) and

At least one dynamic calculator for modifying the initial price on the at least one item based upon conditional rules. (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Referring to claim 25:

A method of performing dynamic pricing on at least one item comprising the steps of:

Setting an initial price on the at least on item; (col 5: lines 28; col 8: lines 13-17)

Performing one of more dynamic price calculations on the at least one item based upon one or more conditional rules, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein these two pricing steps yield price information for the at least one item. (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Referring to claim 26:

A method of performing dynamic pricing on at least one item comprising the steps of:

Performing one or more static price calculations on the at least one item that are not conditional; and (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Performing one or more dynamic price calculations on the at least one item based upon one or more conditional rules, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein these two price calculation steps yield price information for the at least one item. (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Referring to claim 27:

The method of claim 26 further comprising the step of utilizing elements of a price environment to perform the calculations. (col 5: lines 26-61)

Referring to claim 28:

The method of claim 26 further comprising outputting price information after the calculations are complete. (col 4: lines 1-2, 5-7)

Referring to claim 31:

A method of allowing a user to create rules for dynamic pricing comprising the steps of:

Providing at least one static calculator for making price calculations that are not conditional; (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Providing at least one dynamic calculator for making price calculations based upon conditional rules; and (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Providing a user interface that allows a user to input at least one conditional rule.
(col 6: lines 26-27)

Referring to claim 33:

The method of claim 32 further comprising a step of transforming the rule to an executable format. (col 6: lines 35-36)

Referring to claim 34:

A computer program product, residing on a computer-readable medium, for dynamic pricing, the computer program product comprising instructions for causing a computer to:

Set an initial price on at least one item; and (col 5: lines 28; col 8: lines 13-17)

Perform dynamic price calculations on the at least one item, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein these instructions yield price information for the at least one item. (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Referring to claim 35:

The computer program product of claim 34 wherein the computer-readable medium includes a magnetic disk. (col 3: lines 66-67; col 4: line 1)

Referring to claim 36:

The computer program product of claim 34 wherein the computer-readable medium includes an optical disk. (col 3: line 67; col 4: line 1)

Referring to claim 37:

A computer program product, residing on a computer-readable medium, for dynamic pricing, the computer program product comprising instructions for causing a computer to:

Perform static price calculations on at least one item that are not conditional; and
(col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Perform dynamic price calculations on the at least one item based upon conditional rules, (col 2: lines 49-54; col 6: lines 53-54; col 7: lines 11-12; col 8: lines 13-17)

Wherein these instructions yield price information for the at least one item. (col 2: lines 3-5; col 7: lines 28-29; col 8: lines 41-42)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maritzen et al.

As per claim 18, Maritzen does not explicitly state that his invention network is a wireless network. The Examiner submits, however, that it would have been obvious to one having ordinary skill in the art to include transaction on a wireless network. Maritzen provides specific motivation by indication that as other commercial communication networks are developed, the invention may be applied as well to transactions on those networks. (col 3: lines 12-15)

As per claim 32, Maritzen does not explicitly states that the rules or stored in a database field in text format. However, official notice is taken that it is not new and well known to store database fields in text format such as XML.

5. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maritzen et al in view of U.S. Pat No. 4,351,033 to Uchimura et al.

As per claim 29, Maritzen does not disclose storing the calculation history with the one or more rules used to calculate the price. Uchimura discloses that the conditional data concerning how package will be shipped are stored in memory areas. (col 16 lines 2-10) Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Maritzen's invention to include a calculation history which also include the conditional rules used to calculate the price. One would be motivate to perform such modification to record the transaction history to facilitate future calculations with the same conditional rules.

As per claim 30, Maritzen does not disclose the price calculation history may be used to recalculate a price in the future. Uchimura discloses that when dealing with multiple parcels of the same way of mail and destined to the same region with the

setting of the postal condition data of the first postal parcel, then the postal charge calculation can be simply obtained by merely measuring the weight for each parcel. (col 16: lines 11-20) Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Maritzen's invention to include a price calculation history and use the history to recalculate price in the future. One would be motivated to perform such modification to reduce the number of calculation needed for items if the rules applied are the same.

Conclusion

1. Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to determining price of items based on conditional rules:

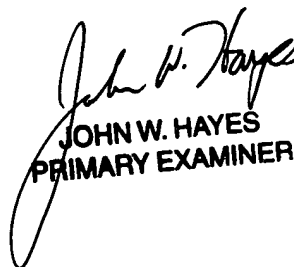
U.S. Pat No. 6,195,646 to Grosh et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rutao Wu whose telephone number is (571)272-3136. The examiner can normally be reached on Mon-Fri 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571)272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rw


JOHN W. HAYES
PRIMARY EXAMINER